

EXHIBIT 5

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

ORACLE AMERICA, INC.,)
Plaintiff,)
vs.) No. CV 10-03561 WHA
GOOGLE, INC.,) VOLUME I
Defendant.)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

Videotaped Deposition of NOEL POORE,
taken at 42 Chauncy Street, Boston,
Massachusetts, commencing at 2:05 p.m.,
Wednesday, September 7, 2011, before
Jill Shepherd, RPR, MA-CSR No. 148608,
NH-CSR No. 128, CA-CSR No. 13275, CLR,
and Notary Public.

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<p>1 Q. When did you begin working on the underlying 2 data in benchmarking for this report? 3 MS. AGRAWAL: Objection. Form. 4 A. Earlier this year after I received the 5 request to assist the legal team. 6 Q. Do you recall when you started working on 7 this? 8 MS. AGRAWAL: Same objection. 9 A. Well, I said earlier that, to the best of my 10 recollection, I received the request in the 11 March or maybe April time frame, so that 12 would have been when I began the technical 13 work that ended up with this report. 14 Q. Did you draft the report? 15 MS. AGRAWAL: Objection. Form. 16 A. Yes, I did. 17 Q. Did you have any help? 18 MS. AGRAWAL: Objection. Form. 19 A. Yes. The exact format of the report -- you 20 know, I did receive some -- 21 MS. AGRAWAL: Sorry. I caution the 22 witness not to reveal any attorney-client 23 privileged communications. 24 To the extent that you can answer the 25 question without doing so, you can.</p> <p style="text-align: right;">Page 22</p>	<p>1 discussed my report with Mr. Vandette. 2 Q. Did you discuss your report with Erez 3 Landau? 4 MS. AGRAWAL: Objection. Form. 5 A. No. 6 Q. Did you discuss your report with Seeon 7 Birger? 8 MS. AGRAWAL: Objection. Form. 9 A. No. 10 Q. Anyone else you discussed your report with 11 other than Professor Mitchell and 12 Mr. Kessler? 13 MS. AGRAWAL: Objection. Form. 14 A. I don't recall discussing it with anyone 15 else, no. 16 Q. Did you discuss it with some attorneys; is 17 that correct? 18 MS. AGRAWAL: And I caution -- I 19 instruct the witness -- caution the witness 20 not to reveal attorney-client privileged 21 communications; but to the extent you can 22 answer the question with a yes or no, you 23 can answer. 24 A. Yes, I have. I have discussed the report 25 with attorneys, yes.</p> <p style="text-align: right;">Page 24</p>
<p>1 THE WITNESS: Okay. 2 A. So I did receive some help with the exact 3 format of the report and some of the -- 4 Q. How long did it take you to draft the 5 report? 6 MS. AGRAWAL: Objection. Form. 7 A. It was written over a period of several 8 weeks, as far as I recall. It wasn't 9 something that I was working on, you know, 10 100 percent of the time. 11 Q. Did you speak with Professor Mitchell 12 regarding your report? 13 MS. AGRAWAL: Objection. Form. 14 A. Yes. I have been involved with a number of 15 phone conversations with Professor Mitchell. 16 Q. Did you speak with Peter Kessler regarding 17 the report? 18 MS. AGRAWAL: Objection. Form. 19 A. Yes. Mr. Kessler was involved in some of 20 those conversations too, yes. 21 Q. Did you speak with Mr. Vandette? 22 MS. AGRAWAL: Objection. Form. 23 A. I don't recall specifically whether 24 Mr. Vandette was involved in any of those 25 conversations. I have not directly</p> <p style="text-align: right;">Page 23</p>	<p>1 Q. Did you discuss the report with any other 2 Oracle engineers? 3 A. No. 4 Q. Did any Oracle engineers assist you in your 5 performance benchmarking or any of the work 6 that you did to prepare this report? 7 MS. AGRAWAL: Objection. Form. 8 A. No. 9 Q. So you did all the work in this report by 10 yourself, correct? 11 A. That's correct. 12 Q. Do you have any opinions regarding this case 13 that are not included in your report? 14 MS. AGRAWAL: Objection. Form. 15 A. Well, this report is on a very -- you know, 16 specifically relating to two of the seven 17 patents that are in question. You know, I 18 have been specifically asked to write the 19 report on those and not to form or express 20 any opinions on anything else about this 21 case. 22 Q. So you have no opinions regarding any of the 23 other asserted patents or issues in this 24 case; is that correct? 25 MS. AGRAWAL: Objection. Form.</p> <p style="text-align: right;">Page 25</p>

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<p>1 A. Well, not -- you know, I'm not a patent 2 attorney, but it does seem likely to me from 3 an engineering opinion that some of the 4 other patents at least are indeed infringed. 5 Q. You've reviewed the patents? 6 MS. AGRAWAL: Objection. Form. 7 A. I have not reviewed the patents. I haven't 8 sat down and read the patent documents. I 9 know -- 10 Q. Does your report include all of your 11 opinions with respect to the two patents 12 that you were asked to address? 13 A. Yes. 14 MS. AGRAWAL: Objection. Form. 15 Q. Is Oracle paying you anything in addition to 16 your regular compensation for your work in 17 this case? 18 MS. AGRAWAL: Objection. Form. 19 A. No. 20 Q. Approximately how many hours have you worked 21 on this case? 22 MS. AGRAWAL: Objection. Form. 23 A. So this is not something that I have been 24 counting. 25 Q. Yeah. But, generally, do you have any idea</p> <p style="text-align: right;">Page 26</p>	<p>1 A. No. 2 Q. Do you have any financial interest in the 3 outcome of this case? 4 MS. AGRAWAL: Objection. Form. 5 A. No. 6 Q. What is your annual compensation at Oracle? 7 MS. AGRAWAL: Objection. Form. 8 A. Approximately \$192,000. 9 Q. Do you get a bonus in addition to that 10 salary? 11 MS. AGRAWAL: Objection. Form. 12 A. Yes. There is a bonus at the discretion of 13 my manager. 14 Q. Do you have Oracle stock or options? 15 A. I do have some options that were issued when 16 Sun purchased Savaje. 17 Q. How many? 18 A. I believe that there are a few, you know, a 19 few hundred options outstanding. 20 Q. You have no Oracle stock currently? 21 A. I do not own any Oracle stock currently, 22 that's correct. 23 Q. And you have a few hundred options? 24 A. I believe that's the right number, yes. 25 Q. Have you been informed that you would</p> <p style="text-align: right;">Page 28</p>
<p>1 of how many days it would have added up to? 2 MS. AGRAWAL: Objection. Form. 3 A. I think the total must -- the total amount 4 of time I have spent on this since earlier 5 in the year must be, you know, at least 6 four -- you know, four to six weeks, 7 something like that, if you were to take all 8 the time and turn it into a full-time 9 equivalent. 10 Q. Is your involvement in this case part of 11 your current job responsibilities? 12 MS. AGRAWAL: Objection. Form. 13 A. Yes. 14 Q. Your management knows that you are working 15 on this case, correct? 16 MS. AGRAWAL: Objection. Form. 17 A. Yes. 18 Q. Have you in the past performed any work for 19 Oracle or Sun in connection with any other 20 case? 21 MS. AGRAWAL: Objection. Form. 22 A. No. 23 Q. Are you currently working for Oracle in 24 connection with any other case? 25 MS. AGRAWAL: Objection. Form.</p> <p style="text-align: right;">Page 27</p>	<p>1 receive anything in return for your work in 2 this case such as a bonus or a promotion? 3 A. No. 4 Q. Looking at your report on page 19, is that 5 your signature? 6 A. Yes. 7 Q. And did you sign this document on August 6, 8 2011? 9 A. Yes. 10 Q. Is there anything in this report that you 11 believe should be corrected or changed? 12 A. There is. In reviewing the materials, I did 13 notice one error in one of the attachments. 14 The spreadsheet, which contains the results 15 of the '702, experiment three, the column 16 headers for the number of classes and the 17 number of quickened methods are switched. 18 Q. Did that affect the results you obtained 19 from the data in that spreadsheet? 20 A. No. 21 Q. So that doesn't change the data reflected in 22 this report; is that correct? 23 A. That's correct. 24 Q. Are you currently working on any 25 supplemental report or analysis?</p> <p style="text-align: right;">Page 29</p>

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<p>1 MS. AGRAWAL: Objection. Form. 2 I caution the witness not to reveal 3 any attorney-client privileged 4 communications. 5 A. No. I have not been asked to produce any 6 supplemental reports or updates to this 7 report or anything. 8 Q. Are you conducting any additional analysis 9 of Dalvick Virtual Machine or Android? 10 MS. AGRAWAL: Same objection. Same 11 caution. 12 A. I'm not conducting any new technical work in 13 this area at the moment, no. 14 Q. In preparing your report, you looked at 15 Android source code; is that correct? 16 A. That's correct. 17 Q. Was that Android source code public, what 18 you received from the publicly available Web 19 site? 20 A. Yes. As I outlined, for example, in 21 paragraph 13 of my report, then the source 22 code that was used for these experiments was 23 pulled from the publicly-available Android 24 source code repository. 25 Q. Did you review any source code relating to</p> <p style="text-align: right;">Page 30</p>	<p>1 those? 2 MS. AGRAWAL: Objection. Form. 3 A. There was one page that I looked at that 4 summarized the Dalvick instruction set 5 and -- but I don't recall exactly where that 6 page was. 7 Q. Did you watch any videos relating to Android 8 on the Internet? 9 A. Not specifically in relation to this work. 10 I mean, I had watched prior to this work 11 than I had watched, you know, videos 12 relating to Android, for example, Google IO 13 presentations. 14 Q. Prior to this work, did you look at any 15 other technical documents relating to 16 Android? 17 A. Yes. There is Java doc for the Android, you 18 know, the Android APIs on the Internet, and 19 I certainly consulted that during prior work 20 and while I was writing applications. 21 Q. Did you look at any documents that were 22 produced by Google to Oracle in this case, 23 and those documents would likely have 24 numbers on the bottom of the page? 25 A. No.</p> <p style="text-align: right;">Page 32</p>
<p>1 any particular Android-based device? 2 MS. AGRAWAL: Objection. Form. 3 A. No. 4 Q. Did you look at any technical documents 5 publicly available in an Android Web site? 6 A. Yes. So, for example, in Appendix C, which 7 is on page 32 of my report, then there is 8 the URL of a document, public document, 9 there on the Android Web site, which 10 specifies the format of the Dalvick 11 executable file. 12 Q. You looked at that document? 13 A. Yes. 14 Q. Did you look at any other technical 15 documents? 16 A. I can't think of any other specific 17 technical documents that I consulted, no. 18 Q. Did you look at any Web pages on the Android 19 Web site? 20 A. Well, I did consult the Web pages on how to 21 download the Android source, how to set up a 22 build environment, how to install the repo 23 tool that is used to set up the source code 24 repository and so on. 25 Q. Did you look at any Web pages besides for</p> <p style="text-align: right;">Page 31</p>	<p>1 Q. The source code that you mentioned before 2 relating to Android, did you personally 3 download that? 4 A. Yes. 5 (Exhibit 475 marked.) 6 Q. Exhibit 475 is U.S. patent number 5,966,702. 7 I will refer to it as the "702 patent," and 8 this is one of the patents asserted in this 9 case. 10 Have you seen this patent before? 11 A. Yes. 12 Q. Have you reviewed the patent claims? 13 MS. AGRAWAL: Objection. Form. 14 A. I have looked through the patent, but at no 15 time have I been asked to express an opinion 16 on exactly which claims are infringed or 17 anything like that. 18 Q. Do you know which claims are asserted in 19 this case? 20 MS. AGRAWAL: Objection. Form. 21 A. No. 22 Q. Was any of the work that you did and 23 described in your report particular to any 24 individual claim in the '702 patent? 25 MS. AGRAWAL: Objection. Form.</p> <p style="text-align: right;">Page 33</p>

<p>1 A. So the guidance that I was given in 2 conversation with Dr. Mitchell was to focus 3 my work on the shared constant table that is 4 used in the Dalvick executable file format. 5 Q. So Professor Mitchell told you what to look 6 at with respect to the accused 7 functionality; is that correct? 8 A. Yes. 9 Q. But you didn't actually review the asserted 10 claims in this case? 11 MS. AGRAWAL: Objection. Form. 12 Q. Is that correct? 13 A. That's correct, yes. 14 Q. Are you familiar with the concept of a 15 multiclass file? 16 MS. AGRAWAL: Objection. Form. 17 A. I am familiar with the concept of packing 18 multiple classes into a single file 19 structure, yes. 20 Q. Are you familiar with the concept of a 21 multiclass file as it is described in the 22 '702 patent? 23 MS. AGRAWAL: Objection. Form. 24 A. I guess as an engineer. I'm reluctant to 25 answer that question with a definite yes,</p> <p style="text-align: right;">Page 34</p>	<p>1 single file in order to benefit from the 2 fact that they are within a single file. 3 Q. Have multiclass files been implemented in 4 Sun or Oracle products? 5 MS. AGRAWAL: Objection. Form, 6 outside the scope. 7 A. I don't actually know whether a multiclass 8 file in this sense that we've just 9 discussed, or that I just discussed, has 10 actually been implemented in any Sun or 11 Oracle product that has shipped. 12 Q. You don't know if the multiclass file 13 described in this patent has ever shipped in 14 an Oracle product? 15 MS. AGRAWAL: Objection. Form. 16 A. Well, there is a form of multiclass file 17 that is implemented in the CVM product, so 18 CVM has the ability to romize, 19 R-O-M-I-Z-E -- to romize a defined 20 collection of classes. And the -- so those 21 classes are then -- the loaded form of those 22 classes is then stored in a single file. So 23 I guess you could argue that that is a 24 multiclass file. 25 Q. Do you mean that the romizer can create a</p> <p style="text-align: right;">Page 36</p>
<p>1 because I'm not necessarily familiar enough 2 with the detail of this patent to -- you 3 know, it seems like an ambiguous question. 4 Q. Do you understand the -- let me rephrase. 5 Do you understand that a jar file will 6 have many different class files in it? 7 MS. AGRAWAL: Objection. Form. 8 A. I understand that a jar file does contain 9 many different class files, but that the 10 structure of the jar file makes no attempt 11 to combine those different class files in 12 any way. A jar file is specifically -- I 13 mean, it is a structure that is specifically 14 designed to package multiple files of any 15 kind, not specifically class files, into a 16 single container file. 17 Q. So a multiclass file, as you understand it, 18 combines classes in some form or another? 19 MS. AGRAWAL: Objection. Form. 20 A. I would understand the term "multiclass 21 file" to mean that you are doing more than 22 simply, you know, bundling multiple 23 independent classes into a single file, but 24 that you are somehow operating on the 25 classes which are contained within the</p> <p style="text-align: right;">Page 35</p>	<p>1 multiclass file? 2 MS. AGRAWAL: Objection. Form, 3 outside the scope. 4 Sorry, Mr. Franz. I don't want to get 5 in this fight with you again. I'm going to 6 ask you to stick to the report. The fact 7 that he's not here as a fact witness or to 8 get into topics that are not within his 9 report. 10 Q. Can you answer the question? 11 MS. AGRAWAL: Same objection. 12 A. So I'm not part of the CVM team, and, 13 therefore, I wouldn't qualify myself as an 14 expert in CVM. But my understanding is 15 that, yes, it would be reasonable to 16 understand the romized class file as a 17 multiclass file. 18 Q. Do you know of any multiclass files in JDK? 19 MS. AGRAWAL: Objection. Form, 20 outside the scope. Same caution. 21 A. No, I do not. 22 Q. Is it your understanding that multiclass 23 files have a shared constant pool? 24 MS. AGRAWAL: Objection. Form, 25 outside the scope.</p> <p style="text-align: right;">Page 37</p>

<p>1 Q. Have you tried comparing the dex file to its 2 dexdump output? 3 MS. AGRAWAL: Objection. Form. 4 A. No. I don't believe I have done anything 5 that would fall under that heading, no. 6 MR. FRANCIS: Okay. Why don't we 7 take a five-minute break. And we'll try to 8 wrap it up. 9 THE VIDEOGRAPHER: The time is 10 4:17. We are now off the record. 11 (Short recess.) 12 THE VIDEOGRAPHER: The time is 13 4:28. We are now back on the record. 14 (Exhibit 476 marked.) 15 Q. I bet you figured this was coming. 16 Exhibit 476 is U.S. patent number 17 6,061,520. I will refer to it as the '520 18 patent, and this is asserted by Oracle in 19 the case. 20 Have you seen this patent before? 21 A. Yes, I have seen it. 22 Q. Have you reviewed it? 23 A. No. As with the other -- as with the 24 '702 patent, I have seen it, I have scanned 25 through it, but I haven't seen a detailed</p> <p style="text-align: right;">Page 74</p>	<p>1 the Java byte codes that initialize an array 2 and saving the initialized array value in 3 order -- and using that instead of executing 4 the byte codes that perform the 5 initialization. 6 Q. Do you know if this technique was 7 implemented in any Oracle products? 8 MS. AGRAWAL: Objection. Form, 9 outside the scope. 10 A. I don't know that, no. 11 Q. You don't know if any Oracle Java products 12 have this static array initialization -- 13 MS. AGRAWAL: Same objection. 14 Q. -- procedure? 15 MS. AGRAWAL: Same objections. 16 A. I don't. I haven't been asked, you know -- 17 I was never asked to answer that question. 18 Q. Page 13, paragraph 62, you state "To study 19 the effect on dex file size for different 20 primitive data types, I created a number of 21 simple Java programs, all of which are 22 similar to the following," and then you 23 provide some code; is that correct? 24 A. Yes. 25 Q. Is this what a typical Android application</p> <p style="text-align: right;">Page 76</p>
<p>1 review of the -- of all of the claims and so 2 on. 3 Q. Do you know which claims are asserted in 4 this case from this patent? 5 A. I do not. 6 Q. Have you reviewed Oracle's infringement 7 contentions relating to this patent? 8 A. Yes. I was provided with the -- with that 9 document for the '520 patent, and I scanned 10 through it. So the process for this patent 11 was basically the same as for the '702. I 12 consulted with John -- I forgot his name 13 now. 14 Q. Professor Mitchell? 15 A. Professor Mitchell, thank you. So I 16 consulted with Professor Mitchell, and he 17 gave me direction. And the outcome of that 18 conversation was about how to proceed in 19 terms of testing and technical work for this 20 patent report. 21 Q. Do you believe you have a general sense of 22 what this patent is about? 23 MS. AGRAWAL: Objection. Form. 24 A. Yeah. I believe, generally speaking, this 25 patent is about replacing the -- simulating</p> <p style="text-align: right;">Page 75</p>	<p>1 looks like? 2 MS. AGRAWAL: Objection. Form. 3 A. This is code that is specifically structured 4 to enable -- to enable the measurement of 5 the effect on the size of the dex file of 6 different data types, array sizes, and 7 whether or not the array initialization is 8 being optimized. 9 Q. How often are static arrays used in an 10 Android application? 11 MS. AGRAWAL: Objection. Form. 12 A. So I have not -- I have not performed a 13 survey of an Android applications in 14 general, but, you know, in my experience, 15 initialized arrays are, you know, relatively 16 common in applications, or in Java source 17 code in general. I wouldn't say that they 18 are a huge, you know, component of the 19 source code -- of most source code, but they 20 are used quite frequently. 21 Q. So if you had an application, what 22 percentage of that application would you 23 expect to have static arrays? Would that be 24 one percent of the application? Ten percent 25 of the application?</p> <p style="text-align: right;">Page 77</p>

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3 COMMONWEALTH OF MASSACHUSETTS
4 MIDDLESEX, SS.
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NOEL POORE, the witness whose
8 deposition taken on September 7, 2011 is
hereinbefore set forth, was satisfactorily
9 identified by means of driver's license, and
10 was duly sworn by me, and that the foregoing
transcript is a true and accurate record of
11 the testimony given by such witness and such
12 testimony is a true and accurate
13 transcription of my stenotype notes to the
14 best of my knowledge, skill, and ability.

18 IN WITNESS WHEREOF, I have hereunto
19 set my hand and notarial seal this 8th day
20 of September, 2011.

21
22
23 _____
24 Jill Shepherd, RPR
25 Notary Public
My Commission expires: April 18, 2014

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3 WEDNESDAY, SEPTEMBER 7, 2011
4
5 WITNESS PAGE

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12	NUMBER	DESCRIPTION	PAGE
13			

15 30(B)(1) Deposition of
16 Noel Poore

19 Exhibit 474 Resume 9

21 Exhibit 476 U.S. Patent 6,061,520 74

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